Symantec™ Event Collector for UNIX Operating Systems Integration Guide

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Documentation version 1.0

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Chapter 1

Introducing the Symantec Event Collector for UNIX Operating Systems

This chapter includes the following topics:

- About the Symantec Event Collector for UNIX Operating Systems
- Components of the Symantec Event Collector for UNIX Operating Systems
- How the Symantec Event Collector for UNIX Operating Systems works
- What you can do with the Symantec Event Collector for UNIX Operating Systems

About the Symantec Event Collector for UNIX Operating Systems

The Symantec Event Collector for UNIX Operating Systems enables centralized, cross-tier logging, alerting, and reporting between the Symantec Enterprise Security Architecture (SESA™) event management system and the UNIX operating system.

The Symantec Event Collector for UNIX Operating Systems retrieves events that are generated by the UNIX operating system and forwards these events to SESA. These events are stored in the SESA DataStore (a database), where you can view them in reports, use them as the basis for configuring alert notifications and incident creation, and configure them as raw data for report generation. The Symantec Event Collector for UNIX Operating Systems retrieves new events from the UNIX operating system log files. Each supported UNIX operating

system event is mapped to a corresponding SESA event. Each supported event is also assigned a Standard Event Code for use with Symantec Incident Manager.

After you install the Symantec Event Collector for UNIX Operating Systems, the UNIX operating system product is integrated with SESA. When a product is integrated with SESA, you can use the SESA Console to view the events that it forwards to SESA. The SESA Console provides a central location in which to view and manage the reporting of event data across multiple SESA-enabled security products.

About SESA

SESA is an event management system that collects data from events generated by security products. SESA categorizes events into classes such as antivirus, content filtering, network security, and systems management. The range of events varies depending on the security products that integrate with SESA.

The events conform to an extensible family of event classes and types, which are defined by sets of XML schema. Once collected, event information is stored in the SESA DataStore for access by SESA management functions through the SESA Console.

For more information about SESA, see the *Symantec Enterprise Security Architecture Installation Guide* and the *Symantec Enterprise Security Architecture Administrator's Guide*.

Prior requirements for using the Symantec Event Collector for UNIX Operating Systems

The Symantec Event Collector for UNIX Operating Systems integrates your existing UNIX operating system installation with SESA. You should have prior knowledge of the UNIX operating system.

You should also be proficient in administering UNIX operating system platforms. The supported operating systems for the collector component of the Symantec Event Collector for UNIX Operating Systems are as follows:

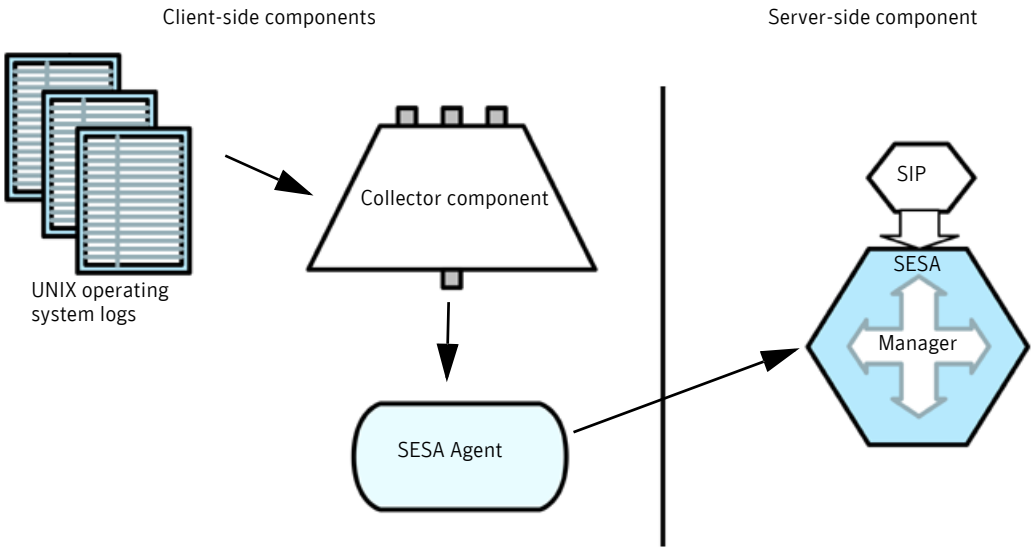
- Red Hat Linux 7.2
- Sun Solaris 8/9

Components of the Symantec Event Collector for UNIX Operating Systems

The Symantec Event Collector for UNIX Operating Systems is comprised of server-side and client-side components, which you install separately. The server-side component is installed on the SESA Manager computer. Client-side components are either installed on the same computer as the security product or on another computer that has access to security product source data.

Figure 1-1 shows an overview of the components.

Figure 1-1 Basic component overview



Server-side component

The server side of the Symantec Event Collector for UNIX Operating Systems consists of a SESA Integration Package (SIP), which you install using the SESA Integration Wizard. This package extends the SESA DataStore tables and fields so that the DataStore can receive collected events from the UNIX operating system. It also adds additional reports for viewing the collected events in the SESA Console.

Client-side components

The client side of the Symantec Event Collector for UNIX Operating Systems consists of the following components:

- Collector component
  This component is the program that parses the UNIX operating system log file. The collector component determines which events to forward, and then formats them for forwarding to the SESA Agent.
  The collector component also performs some event aggregation and high-level attack analysis. In addition, users can configure this component for some event filtering tasks.
- SESA Agent
  The SESA Agent is responsible for all communication with the SESA Manager. The collector component passes formatted events to the SESA Agent for forwarding to the SESA Manager.

The client computer must be able to connect to either a Symantec LiveUpdate server or a LiveUpdate server on your network to receive the latest event signatures.

How the Symantec Event Collector for UNIX Operating Systems works

The collector component obtains data from the UNIX operating system and composes it into a SESA-compatible format. The collector component may also perform some event aggregation, analysis, and filtering, as well as assign a Standard Event Code to the event for correlation processing by Symantec Incident Manager (if installed). The collector component then passes the event to the SESA Agent for forwarding to the SESA Manager, which inserts the event into the SESA DataStore.

A SESA Agent must be installed on the same computer as the Symantec Event Collector for UNIX Operating Systems. The Symantec Event Collector for UNIX Operating Systems Installation Wizard will install a SESA Agent if one is not already present.

When you install the SESA Agent, you provide a small set of initial parameters (such as the SESA Manager IP address and port). After you install the SESA Agent, you can change its default parameters using the SESA Manager.

See "Configuring the SESA Agent" on page 46.

The SESA Agent logs events that it receives from the Symantec Event Collector for UNIX Operating Systems to a SESA Manager. When the SESA Manager is unavailable, the SESA Agent queues messages for later delivery. The default maximum queue size is 2 MB, but you can change the queue size by using the SESA Console.

See "Configuring the SESA Agent" on page 46.

How the Event Collector processes events

The Symantec Event Collector for UNIX Operating Systems creates SESA events based on the event data that it finds within the UNIX operating system log files. The Event Collector determines how to classify UNIX operating system events by examining the contents of key fields.

The Symantec Event Collector for UNIX Operating Systems assigns one of the following categories to each event:

Security	Messages that come from the UNIX operating system log file
Application	Events that are generated by the Symantec Event Collector for UNIX Operating Systems

The Symantec Event Collector for UNIX Operating Systems also assigns each event one of the following severities:

5 - Informational	Events that represent expected behavior
4 - Warning	Events that represent suspicious behavior
3 - Minor	Events that could require attention
2 - Major	Events that require attention now
1 - Critical	Events that require attention now with a broad range of application to the enterprise

In the SESA environment, events that arrive from a SESA Agent are generally understood to be events that are generated by the system on which the SESA Agent is installed. However, because the Symantec Event Collector for UNIX Operating Systems is collecting events from a data source that may receive events from multiple computers, the event data is structured to preserve the identity of the originating computer.

Events from the Symantec Event Collector for UNIX Operating Systems are logged as if they originated from the computer that logged the message. Therefore, collected events will display the machine name of the computer that logged the UNIX operating system event, rather than the machine name of the computer on which the Event Collector resides.

About the Application Event category

In addition to the events that the Symantec Event Collector for UNIX Operating Systems collects and forwards to the SESA Manager, the Event Collector generates two events of its own. These are categorized as Application Events. These events indicate that the Event Collector daemon is starting or stopping, so that this information might be available at the SESA Console.

Table 1-1 describes the two events generated by the Symantec Event Collector for UNIX Operating Systems.

Table 1-1 Symantec Event Collector for UNIX Operating Systems events

Event	Category	Severity	Description
Application Start	Application	Informational	The Event Collector is starting.
Application Stop	Application	Informational	The Event Collector is stopping.

What you can do with the Symantec Event Collector for UNIX Operating Systems

After the Symantec Event Collector for UNIX Operating Systems is installed and running, your UNIX operating system events will be inserted into the SESA DataStore. From the SESA Console, you can then view, manage, and create reports based on the event data.

With the Symantec Event Collector for UNIX Operating Systems, you can do the following:

- Collect events for insertion into the SESA DataStore.
  See "Installing the Symantec Event Collector for UNIX Operating Systems" on page 23.
- View raw data and reports in the SESA Console.
  See "Viewing reports for the Event Collector" on page 43.
- Create custom reports in the SESA Console.
  See "Creating custom reports" on page 44.

- Integrate your events for correlation within Symantec Incident Manager (if Symantec Incident Manager is installed on your SESA Manager).
  See "Integrating with Symantec Incident Manager" on page 44.
- Retrieve updated content and rules as they become available.
  See "Using LiveUpdate technology" on page 47.

Chapter 2

Installing the Symantec Event Collector for UNIX Operating Systems

This chapter includes the following topics:

- Before you install the Symantec Event Collector for UNIX Operating Systems
- System requirements
- Installing the Symantec Event Collector for UNIX Operating Systems
- After you install the Symantec Event Collector for UNIX Operating Systems
- Uninstalling the Event Collector
- Installing Java LiveUpdate on the SESA Manager

Before you install the Symantec Event Collector for UNIX Operating Systems

The Symantec Event Collector for UNIX Operating Systems installs shared and product-specific components in order to send events to SESA. To enable the Event Collector to forward events to SESA, you must do the following:

- Install the server-side (SESA Manager) component using the SESA Integration Wizard.
- Install the collector component and SESA Agent.

Planning for the Event Collector installation

Before you install the Event Collector, you should plan for the following installation phases:

- Installing the SESA Integration Package
- Installing the collector component and SESA Agent

Planning to install the SESA Integration Package

The first phase of installing the Symantec Event Collector for UNIX Operating Systems is to install the SESA Integration Package (SIP) using the SESA Integration Wizard. This package extends the tables and fields in the SESA DataStore so that they are prepared to accept Event Collector data.

The SESA Integration Package for the Event Collector must be installed on the computer on which the SESA Manager is installed. You install the SIP by running the SESA Integration Wizard on the SESA Manager computer. The additional components let you view and manage reports for UNIX operating system events in the SESA Console. You must install the SESA Integration Package on every SESA Manager that will receive events from the Event Collector.

Before running the Symantec Integration Wizard, you should run LiveUpdate on your SESA Manager as well as any installed products to ensure that you have the latest versions available.

Planning to install the collector component and SESA Agent

The second phase of installing the Symantec Event Collector for UNIX Operating Systems is to install the collector component. The collector component reads events from the UNIX operating system log files, formats them, and sends them to the SESA Agent. The SESA Agent installs with the collector component if one is not already present. The SESA Agent enables the communication and configuration of events between SESA and the UNIX operating system product.

The Event Collector must be installed on a computer that has access to the UNIX operating system log files. To install the Event Collector, use the Symantec Event Collector for UNIX Operating Systems Installation Wizard.

Ensuring network connectivity between the Event Collector computer and the SESA Manager

Appropriate routing must exist between the computer on which the collector component will be installed and the SESA Manager for event messages to reach the SESA Manager. In addition, ensure that there is no firewall or device policy blocking the connection between the Event Collector and the SESA Manager.

Ensure network connectivity

You can verify the connectivity between two networked computers by executing a successful ping command from each computer, and by running a test Telnet session.

To execute the ping command

- On the SESA Manager computer, at the command prompt, type the following command:

  ping <AGENT-IP-ADDRESS>

  where <AGENT-IP-ADDRESS> is the IP address of the computer on which you are installing the Event Collector. If the computers are properly connected, you receive several successful reply messages, and the request does not time out.

  This is only a test of connectivity. Your firewall may be configured to prevent ping traffic without impeding SESA Agent connectivity.

To run a test Telnet session

- On the computer on which the collector component will be installed, at the command prompt, type the following test command:

  telnet <SESA-IP-ADDRESS> 443

  where <SESA-IP-ADDRESS> is the IP address of the SESA Manager. The connection appears to stop responding, but it is not refused. After you type a few characters, a message appears indicating that the connection has been lost.

System requirements

Before you install the Symantec Event Collector for UNIX Operating Systems, ensure that the computer on which the SESA DataStore is installed has enough hard disk space to accommodate the additional security events that UNIX operating systems send to it.

In addition, ensure that the computer or computers on which you plan to install the Event Collector meet the necessary requirements and that the following conditions have been met:

SESA	SESA version 1.1 is installed and operating properly. If you have an earlier version of SESA, you must first uninstall it before you can install version 1.1. You cannot migrate earlier versions of SESA to version 1.1 or reinstall over earlier versions. Version 1.1 is not backward-compatible. For more information, see the *Symantec Enterprise Security Architecture Installation Guide*.
Third-party software	The Event Collector collects UNIX Syslog data from either of the following platforms: ■ Sun Solaris 8/9 ■ Red Hat Linux 7.2 For more information, see the UNIX Syslog documentation. **Note:** If remote Syslog is used, each unique operating system must report to a separate log file. However, different versions of the same operating system can log to the same file.

The Symantec Event Collector for UNIX Operating Systems installs the SESA Agent and the collector component on the same computer. This computer must have access to the UNIX operating system log files.

Event Collector system requirements

The computer on which you install the SESA Agent must meet the following minimum system requirements:

Operating system	■ Red Hat Linux 7.2 ■ Sun UltraSPARC (64 bit) Solaris 8/9
Processor	■ Intel Pentium-compatible 133-MHz processor (up to and including Xeon-class) ■ UltraSPARC II/III
Memory	■ 32 MB of memory for the SESA Agent ■ 64 MB RAM for each UNIX product (128 MB or more recommended)

Hard disk space	■ 35 MB of hard disk space for Event Collector framework program files ■ 95 MB of hard disk space if the SESA Agent, JRE, and the Event Collector are on one computer
Symantec software	One or both of the following installed: ■ Symantec Event Manager for Intrusion Protection 1.0 ■ Symantec Incident Manager 2.0
Sun Java requirements	Java Runtime Environment (JRE) version 1.3.1_02 The JRE is installed along with the Event Collector into a subdirectory of the installation directory specified at installation. By default, the directory is /opt/Symantec/JRE/.
Network connection	TCP/IP connection to a network, with a fixed IP address

These requirements are in addition to resources or requirements of UNIX operating system components that may be running on the same computer.

SESA Agent requirements

If you have more than one SESA-enabled product installed on a single computer, these products can share a SESA Agent. However, each product must register with the Agent. Consequently, even if an Agent has already been installed on the computer for another SESA-enabled security product, you must install the Event Collector to register the particular product with the Agent.

The SESA Agent is preconfigured to listen on IP address 127.0.0.1 and port number 8086. The Symantec Event Collector for UNIX Operating Systems uses this information to communicate with the Agent. If you must change the IP address or port number for the Agent after it is installed, you must do so through the SESA Console. Installed Agents are configured remotely using the SESA Console.

For more information, see the *Symantec Enterprise Security Architecture Administrator's Guide*.

SESA Integration Package requirements

The SESA Integration Package (SIP) for the Symantec Event Collector for UNIX Operating Systems is installed on the SESA Manager computer. The SIP requires version 1.1 of SESA. If you have an earlier version of SESA installed, you must uninstall it before you can install version 1.1. You cannot install version 1.1 over an earlier version or migrate an earlier version to SESA 1.1.

SESA Manager requirements

Before installing any components on the SESA Manager, ensure that the SESA Manager is installed and operating properly, and that it has a fixed IP address.

For more information on installing the SESA Manager, see the *Symantec Enterprise Security Architecture Administrator's Guide*.

You must install the SESA Integration Package for the Event Collector on the SESA Manager before you install the collector component.

SESA DataStore requirements

After you install the SESA Integration Package and the collector component, the collector component can forward events to SESA. The amount of disk space that you need to accommodate the event data depends on how many devices are logging events, how verbose they are, and how long you want to keep the event data in the database.

128 GB should be sufficient to store events from several SESA Agents for 30 days. This number is in addition to disk space for other devices that may already be reporting to SESA. A 128-GB SESA DataStore can store 17-19 million events. You must ensure that the DataStore computer has a fixed IP address.

Table 2-1 describes the suggested minimum size of the SESA DataStore based on the anticipated number of events received in 30 days.

Table 2-1 Minimum size of the SESA DataStore based on data rate

Data rate	Number of events in 30 days	Minimum size of the SESA DataStore
10 events per second	25,920,000	172 GB
30 events per second	77,760,000	518 GB
60 events per second	155,520,000	1,036 GB
100 events per second	259,200,000	1,728 GB

Installing the Symantec Event Collector for UNIX Operating Systems

The Event Collector gathers security information from the UNIX operating system. The Event Collector sends the information through the SESA Agent to the SESA Manager for insertion in the SESA DataStore.

The Event Collector installation sequence is as follows:

- Install the SESA Integration Package (SIP) on the SESA Manager using the SESA Integration Wizard. If you are installing the Event Collector to more than one computer that is being managed by the same SESA Manager, you only need to install the SIP once.
  See "Installing the SESA Integration Package" on page 23.
- Install the Symantec Event Collector for UNIX Operating Systems collector component and the SESA Agent. The Symantec Event Collector for UNIX Operating Systems and the SESA Agent must be installed on the same computer.
  See "Installing the collector component and SESA Agent" on page 25.
- Test the Event Collector installation to verify successful operation.
  See "Testing the Event Collector installation" on page 28.

Installing the SESA Integration Package

The SESA Integration Package (SIP) for the Event Collector extends the functionality of the SESA Manager to include information (such as tables, fields, and reports) specific to the Symantec Event Collector for UNIX Operating Systems.

Warning: Before you install the SESA Integration Package for the Event Collector, back up the SESA Directory and SESA DataStore.

When installing more point products on the same SESA Manager, you may notice a decrease in performance.

You install the SESA Integration Package by running the SESA Integration Wizard. You must run the SESA Integration Wizard on every SESA Manager that will receive UNIX operating system events.

Immediately after you finish installing the SESA Integration Package on the SESA Manager computer, run LiveUpdate to ensure that you are using the latest event signatures.

To install the SESA Integration Package

1. On the SESA Manager computer, insert the Symantec Event Collector for UNIX Operating Systems CD into the CD-ROM drive.
2. If you have AutoStart enabled and the SESA Integration Wizard window appears, cancel the SESA Integration Wizard.
   You must install the SESA Integration Package using the command prompt.
3. At the command prompt, navigate to one of the following folders on the CD:
   - On Linux: /LinuxSyslogCollector
   - On Solaris: /SolarisSyslogCollector
4. Navigate to the SESA1.1-SIPI folder on the CD.
5. Type the following:
   ```
   java -jar setup.jar
   ```
6. In the Welcome to the SESA Integration Wizard dialog box, click **Next**.
7. In the SESA Integration Requirements dialog box, do one of the following:
   - If the local SESA Manager is running, click **Next**.
   - If the local SESA Manager is not running, click **Cancel**.
     You must run the SESA Integration Wizard on the computer on which the SESA Manager is installed.
8. In the SESA Domain Administrator Information dialog box, do the following:
   - In the SESA Domain Administrator Name text box, type the name of the SESA Domain Administrator account.
   - In the SESA Domain Administrator Password text box, type the password for the SESA Domain Administrator account.
   - In the Host Name or IP address of SESA Directory text box, type the IP address of the computer on which the SESA Directory is installed.
     If you are using authenticated SSL instead of the SESA default, anonymous SSL, you must type the host name of the SESA Directory computer. For example, mycomputer.com.
     For more information on SESA default, anonymous SSL, and upgrading to authenticated SSL, see the *Symantec Enterprise Security Architecture Installation Guide*.
   - In the Secure Directory Port text box, type the number of the SESA Directory secure port.
     By default, the port number is 636.
9. Click **Next**.

10 In the Ready to proceed dialog box, do one of the following:
   - If you are ready to proceed, click **Next**.
   - If you want to change your settings, click **Back**.
11 In the Configuring Your System dialog box, after the process is completed, click **Next**.
12 In the SESA Integration Successful dialog box, click **Finish**.

Installing the collector component and SESA Agent

The collector component reads the data from the UNIX operating system log files, formats the data, and forwards it to the SESA Agent. The computer on which you install the collector component must have access to the UNIX operating system log files that you want to monitor.

Note: The JRE 1.3.1_02 is automatically installed along with the Event Collector into a subdirectory of the installation directory specified at installation. By default, the directory is /opt/Symantec/JRE/. The JRE is used by the collector component and the SESA Agent only. It does not interfere with any other JRE installed on the computer.

Install the collector component and SESA Agent

You install the collector component on computers with the supported Linux or Solaris operating systems. If the computer is already running the current version of the SESA Agent, the installation program installs only the collector component and registers it with the SESA Agent. If the SESA Agent is not already installed, the installation program prompts you to specify the information that is needed to install it.

To install the collector component on Linux or Solaris

1 On the computer with access to the UNIX operating system log files, become superuser.
   Ensure that the computer is operating at run level 3 or above before installing.
2 Insert the Symantec Event Collector for UNIX Operating Systems CD and mount the CD-ROM drive.
3 At the command prompt, navigate to one of the following folders on the CD:
   - On Linux: /LinuxSyslogCollector/install
   - On Solaris: /SolarisSyslogCollector/install

4 Do one of the following:

- On Linux, type:

  ```
  ./setup_linux.bin
  ```

- On Solaris, type:

  ```
  ./setup_solarisSparc.bin
  ```

5 In the Welcome to the Symantec Event Collector for UNIX Syslog Install Wizard dialog box, click **Next**.

6 In the Symantec Software License Agreement dialog box, click **I accept the terms of the license agreement**, and then click **Next**.

7 In the Choose the setup type that best suits your needs dialog box, click **Collector Install**, and then click **Next**.

8 In the Please enter the destination directory for installing the SESA Agent dialog box, do one of the following:

- To use the default directory, click **Next**.
- To select another directory, in the Directory Name text box, type a directory name other than root, and then click **Next**.

9 In the SESA Agent Information dialog box, do the following:

- In the Primary SESA Manager IP address box, type the IP address of the SESA Manager to which the SESA Agent directs events.
- In the Primary SESA Manager Port box, type the port number (default is port 443).
- In the Secondary SESA Manager IP address box, type the IP address of SESA Manager to which the SESA Agent directs events upon failure of the primary SESA Manager.
  If there is no secondary SESA Manager, leave this box blank.
- In the Secondary SESA Manager Port box, type the port number of the secondary SESA Manager.
  If there is no secondary SESA Manager, leave this box blank.

10 Click **Next**.

11 In the Please enter the destination install directory for the Symantec Event Collector for UNIX Syslog dialog box, do one of the following:

- To use the default directory, click **Next**.
- To select another directory, in the Directory Name box, type a directory name other than root, and then click **Next**.
  Do not use spaces in the destination directory on Solaris or Linux.

12 In the Symantec Event Collector for UNIX Syslog Information dialog box, do the following:

- In the Local UNIX Syslog Logfile Path Location box, type the path to the directory that contains the local UNIX Syslog file.
  On Linux, the default directory is /var/log/.
  On Solaris, the default directory is /var/adm/.
- In the Local UNIX Syslog Logfile Name box, type the name of the local UNIX operating system log file that the Event Collector should be monitoring for UNIX operating system events.
  The default file name is messages.
- To monitor UNIX operating system log files based on the last modified time, click **True**.

13 Click **Next**.

14 In the Symantec Event Collector for UNIX Operating Systems will be installed in the following location dialog box, verify the summary information, and then click **Next**.

15 In the It is recommended that you run Java LiveUpdate to check for the most recent collector updates dialog box, to run Java LiveUpdate, click **Yes**, and then click **Next**.
The installation process may take several minutes. Do not close any windows that appear during the installation process.

16 In the InstallShield Wizard has successfully installed Symantec Event Collector for UNIX Syslog dialog box, click **Finish**.

To install the collector component in text mode on Linux or Solaris

1 On the computer with access to the UNIX operating system log files, become superuser.
Ensure that the computer is operating at run level 3 or above before installing.

2 Insert the Symantec Event Collector for UNIX Operating Systems CD and mount the CD-ROM drive.

3 At the command prompt, navigate to one of the following folders on the CD:

- On Linux: /LinuxSyslogCollector/install
- On Solaris: /SolarisSyslogCollector/install

4 Do one of the following:

- On Linux, type:

  ```
  ./setup_linux.bin -console
  ```

- On Solaris, type:

  ```
  ./setup_solarisSparc.bin -console
  ```

5 Follow the on-screen instructions.

Testing the Event Collector installation

After the Event Collector is installed, you can verify that the appropriate components are installed and working properly by doing the following:

- Verifying the Event Collector installation
- Verifying the SESA Manager IP address and port
- Verifying SESA Agent operation
- Verifying event collection in the SESA Console

Verifying the Event Collector installation

You must verify that the Event Collector is installed correctly.

Verify the Event Collector installation

To verify the installation, do the following:

- On the Event Collector computer, verify that the appropriate daemons are running.
- Verify that the Symantec Event Collector for UNIX Operating Systems appears in the SESA Console.
- On the SESA Manager, verify that the Event Collector SESA Integration Package was successfully installed.

To verify that the appropriate daemons have started on Linux or Solaris

1 On the computer on which you installed the Event Collector, become superuser.

2 To verify that the SESA Agent daemon process is running, at the command prompt, type the following command:

```
ps -el | grep agentd
```

3 To verify that the collector component daemon process is running, at the command prompt, type the following command:

```
ps -el | grep run-
```

To verify that the Event Collector appears in the SESA Console

1. On the Windows taskbar, click **Start** > **Programs** > **Symantec Enterprise Security** > **SESA Console**.
2. Log on to the SESA Console using a SESA user account with sufficient rights to view SESA events.
   The SESA user must belong to a role that has rights to the SESA-enabled Symantec Event Collector for UNIX Operating Systems.
3. On the Events view tab, in the left pane, expand the appropriate SESA DataStore.
4. Do one of the following:
   - Expand **Host Intrusion Detection**.
   - Expand **Intrusion Detection**.
5. Confirm that you have a new folder labeled Symantec Event Collector for <UNIX> Syslog (where <UNIX> is either Linux or Solaris), and that it contains the following reports:
   - All Events
   - Last 30 days
   - Last 24 hours
   - Last 8 hours
   - By Severity
     (Host Intrusion Detection only)
   - By Generic Alert
     (Host Intrusion Detection only)
6. On the Configurations view tab, expand the top-level domain.
7. Verify that the Symantec Event Collector for UNIX Operating Systems is listed.
   For more information about reports and views, see the *Symantec Enterprise Security Architecture Administrator's Guide*.

To verify that the Event Collector was successfully installed

1. On the Event Collector computer, on the Windows taskbar, click **Start** > **Settings** > **Control Panel**.
2. In the Control Panel window, double-click **Add/Remove Programs**.
3. In the Add/Remove Programs dialog box, verify that Symantec Event Collector for <UNIX> Syslog (where <UNIX> is either Linux or Solaris) is listed.

Verifying the SESA Manager IP address and port

You must verify that the SESA Manager information is correct.

Verify the SESA Manager IP address and port

Verify that you specified the correct SESA Manager IP address (or host name) and the correct number for the SESA Secure Directory port when you ran the SESA Integration Wizard.

To verify the SESA Manager IP address and port on Linux or Solaris

1. On the Event Collector computer, become superuser.
2. Change directories to the installation folder:
   /opt/Symantec/SESA/Agent
3. In a text editor, open the **configprovider.cfg** file.
4. Verify that the following options contain the correct settings for the SESA Manager to which you want to send UNIX operating system events:
   - MgmtServer contains the SESA Manager IP address.
   - MgmtPort contains the SESA Agent port number.

To verify SESA Agent connectivity from the SESA Console

1. In the SESA Console, on the System view tab, in the left pane, expand **Organizational Units** > **Default**.
2. Verify that the name of the computer on which the Event Collector is installed is listed.
3. Right-click the computer name, and then click **Properties**.
4. In the Computer Properties dialog box, on the Services tab, in the Started column, verify that the SESA AgentStart Service displays Yes.

Verifying SESA Agent operation

You must verify that the SESA Agent is operating correctly.

To verify SESA Agent operation on Linux or Solaris

1. On the computer on which you installed the Event Collector, become superuser.
2. To verify that the Event Collector daemon process is running, at the command prompt, type the following command:

```
ps -el | grep agentd
```

3 Change directories to the following installation directory of the SESA Agent:
/opt/Symantec/SESA/Agent

4 To get statistics on the SESA Agent, type the following command:

```
java -jar agentcmd.jar -status
```

The output, including the running status and the SESA Manager URL, will be similar to the following:

```
SESA Agent status: running
Machine Id:  **********obscured**********
Listening on: 127.0.0.1:8086
SSL: On
SESA Manager URL: https://127.0.0.1:443/sesa/servlet/
Total number of post failures: 0
Outbound Thread State: WAIT
Items in Outbound Queue: 0
Queue Status for ProdId 3000
  Queue is stored in memory
  Flush Size (KB): 50
  Flush Time (sec): 300
  Flush Count: 35
  Spool Size (KB): 100
  Max Queue Size (KB): 2000
  Entries waiting in queue: 0
  Total Events processed: 0
  Total Queue Size (bytes): 0
```

Verifying event collection in the SESA Console

You must verify that the SESA Console is collecting events correctly.

To verify event collection in the SESA Console

1 Log on to the SESA Console using a SESA user account with sufficient rights to view SESA events.
The SESA user must belong to a role that has rights to the SESA-enabled Symantec Event Collector for UNIX Operating Systems.

2 On the Events view tab, in the left pane, expand the appropriate SESA DataStore.

3 Expand **Global Events** > **All Events**.

4 Under the menu bar, click **Refresh**.

5 Verify that the Application Start event has been logged by the Symantec Event Collector for UNIX Operating Systems.

After you install the Symantec Event Collector for UNIX Operating Systems

After you have successfully installed the Symantec Event Collector for UNIX Operating Systems, you should perform the following tasks:

- Run LiveUpdate on the SESA Manager.
- Configure the SESA Manager to increase event throughput.

Running LiveUpdate on the SESA Manager

After installing the Symantec Event Collector for UNIX Operating Systems, you should run LiveUpdate on each SESA Manager and on each installation of Symantec Incident Manager (if installed).

As updates become available, you can update the SESA Manager.

To run LiveUpdate on the SESA Manager

1 On the computer on which you installed the SESA Manager, at the command prompt, change directories to the following:
\Sesa\Bin

2 At the command prompt, type the following:
`sesa-lulauncher`

Configuring the SESA Manager to increase event throughput

The SESA Manager has many settings that affect the speed at which events arrive at the SESA Manager for processing and insertion. If you anticipate more than 1,000 events per minute, you may want to lower the rate of event throttling or turn throttling off entirely.

Throttling the flow of events to the SESA Manager

The SESA Console has a throttling option available to regulate the flow of events between the SESA Manager and client computers on which SESA Agents reside. The Throttle desktop settings determine the delay, in seconds, of batched events sent by the SESA Agent on the SESA Manager computer to the SESA Agent on the client computers.

The default value for Throttle desktop is 5 seconds, which instructs SESA to wait 5 seconds after an Agent sends a batch of events before sending the next batch. This severely limits the throughput of SESA Agents and therefore impedes unwanted intruders from overloading the SESA Manager with unwanted events. However, the greater the throttle setting, the greater the risk of stagnating SESA-enabled security products that generate a large number of events.

If you are not seeing events flow to the SESA Manager rapidly enough, you may want to first attempt lowering the value of the Throttle desktop setting to resolve the problem. You can set Throttle desktop to 0 to turn off throttling.

To throttle the flow of events to the SESA Manager

1. On the Internet, go to:
   https://<IP address or FQDN of the SESA Manager computer>/sesa/ssmc
2. Log on to the SESA Console using a SESA user account that has sufficient rights to modify SESA configurations.
   The SESA user must belong to a Manager role that has rights to the SESA-enabled security product.
3. In the SESA Console, on the Configurations view tab, expand **<DomainName.SES>** > **SESA** > **Manager ConfigurationSESA**.
4. Select the configuration that you want to edit.
5. In the right pane, on the Throttle tab, set the desired value for Throttle desktop.
   This is the time in seconds that SESA waits between sending batched events from the SESA Agent queues on the SESA client computers to the SESA Manager. The minimum value is 0, which disables throttling.
6. Click **Apply**.

Uninstalling the Event Collector

You uninstall the Symantec Event Collector for UNIX Operating Systems by uninstalling the collector component on the client computer as well as removing the SESA Integration Package from the SESA Manager computer.

Uninstalling the collector component

Uninstall the collector component from computers that no longer have access to UNIX operating system log files.

Uninstall the collector component

You use the uninstaller program to uninstall the collector component. If no other products on the collector component computer use the SESA Agent, the uninstaller also removes the SESA Agent.

To uninstall the collector component on Linux or Solaris using the InstallShield uninstaller program

1. On the Event Collector computer, become superuser.
2. Change directories to the Symantec Event Collector for UNIX Operating Systems installation directory.
   On Linux, the default directory is /opt/Symantec/LinuxSyslogCollector/_uninst.
   On Solaris, the default directory is /opt/Symantec/SolarisSyslogCollector/_uninst.
3. At the command prompt, do one of the following:
   - For the default path, type:
     ```
     ./uninstaller.bin -is:javahome
     ```
   - If you used an Event Collector installation path other than the default value during the installation, type the Java home directory for the uninstallation. For example:
     ```
     ./uninstaller.bin -is:javahome /opt/Symantec/JRE
     ```
4. In the Welcome to the Symantec Event Collector for UNIX Syslog Uninstall Wizard dialog box, click **Next**.

5 In the Symantec Event Collector for UNIX Syslog will be uninstalled from the following location dialog box, verify the summary information, and then click **Next**.

The Symantec Event Collector for UNIX Operating Systems and the daemon process for the Event Collector (as well as the SESA Agent, if it is no longer needed) are removed from the computer.

Directories that contain logs and other files modified after the installation will remain in the installation directory. It is now safe to delete these files.

6 In the InstallShield Wizard has successfully uninstalled Symantec Event Collector for UNIX Syslog, click **Finish**.

To uninstall the collector component on Linux or Solaris in text mode

1 On the Event Collector computer, become superuser.

2 Change directories to the Symantec Event Collector for UNIX Operating Systems installation directory.

On Linux, the default directory is /opt/Symantec/LinuxSyslogCollector/_uninst.

On Solaris, the default directory is /opt/Symantec/SolarisSyslogCollector/_uninst.

3 At the command prompt, do one of the following:

- For the default path, type:

  ```
  ./uninstaller.bin -console
  ```

- If you used an Event Collector installation path other than the default value during the installation, type the Java home directory for the uninstallation. For example:

  ```
  ./uninstaller.bin -is:javahome /opt/Symantec/JRE
  ```

4 Follow the on-screen instructions.

Uninstalling the SESA Integration Package

Uninstalling the SESA Integration Package for the Symantec Event Collector for UNIX Operating Systems removes only the information (such as tables, fields, and reports) specific to the Symantec Event Collector for UNIX Operating Systems from the SESA Manager.

You uninstall the SESA Integration Package (SIP) by running the SESA Integration Wizard. You must run the SESA Integration Wizard to uninstall the SIP on every SESA Manager on which you installed the SIP for the Symantec Event Collector for UNIX Operating Systems.

Warning: To protect the integrity of the SESA Directory, if you uninstall the SESA Integration Package from one SESA Manager, you must uninstall the SESA Integration Package from all of the SESA Managers on which it was installed.

Do not uninstall the SESA Integration Package from more than one SESA Manager at a time.

To uninstall the SESA Integration Package

1. On the SESA Manager computer, insert the Symantec Event Collector for UNIX Operating Systems CD into the CD-ROM drive.
2. If you have AutoStart enabled and the SESA Integration Wizard window appears, cancel the SESA Integration Wizard.
   You must uninstall the SESA Integration Package using the command prompt.
3. At the command prompt, navigate to one of the following folders on the CD:
   - On Linux: /LinuxSyslogCollector
   - On Solaris: /SolarisSyslogCollector
4. Navigate to the SESA1.1-SIPI folder on the CD.
5. Type the following:
   ```
   java -jar setup.jar -uninstall
   ```
6. In the Welcome to the SESA Integration Wizard dialog box, click **Next**.
7. In the SESA Integration Requirements dialog box, do one of the following:
   - If the local SESA Manager is running, click **Next**.
   - If the local SESA Manager is not running, click **Cancel**.
     You must run the SESA Integration Wizard on the computer on which the SESA Manager is installed.
8. In the SESA Domain Administrator Information dialog box, do the following:
   - In the SESA Domain Administrator Name text box, type the name of the SESA Domain Administrator account.
   - In the SESA Domain Administrator Password text box, type the password for the SESA Domain Administrator account.

- In the Host Name or IP address of SESA Directory text box, type the IP address of the computer on which the SESA Directory is installed.
  If you are using authenticated SSL instead of the SESA default, anonymous SSL, you must type the host name of the SESA Directory computer. For example, mycomputer.com.
- In the Secure Directory Port text box, type the number of the SESA Directory secure port.
  By default, the port number is 636.

9 Click **Next**.

10 In the Ready to proceed dialog box, do one of the following:

- If you are ready to proceed, click **Next**.
- If you want to change your settings, click **Back**.

11 In the Configuring Your System dialog box, after the process is completed, click **Next**.

12 In the SESA Integration Successful dialog box, click **Finish**.

Installing Java LiveUpdate on the SESA Manager

Included with the Symantec Event Collector for UNIX Operating Systems is a SESA Integration Package that installs the Symantec Java LiveUpdate feature on the SESA Manager. This package can be installed to allow for the configuration of Java LiveUpdate through the SESA Console.

After Java LiveUpdate is registered with the SESA Manager, you can create configurations to be distributed to any SESA-enabled product that uses Java LiveUpdate.

The Java LiveUpdate configuration controls how Java LiveUpdate will execute (for example, which proxies and hosts to use). The configuration does not control the scheduling of LiveUpdate.

See "Using Java LiveUpdate" on page 49.

To install Java LiveUpdate on the SESA Manager

1 On the SESA Manager computer, insert the Symantec Event Collector for UNIX Operating Systems CD into the CD-ROM drive.

2 If the installation program starts automatically, click **Cancel**, and then click **Exit** to stop the automatic installation.

3 On the Windows taskbar, click **Start** > **Run**.

4 At the command prompt, type the following:

```
cmd
```

5 Press **Enter**.

6 On the CD-ROM drive, change directories as follows:
cd \JLU20SIPI

7 To launch the installation, type the following command:

```
java -jar setup.jar
```

8 In the Welcome to the SESA Integration dialog box, click **Next**.

9 In the SESA Integration Requirements dialog box, verify that you have the SESA Manager running on this computer, and then do one of the following:

- If you have satisfied the requirements, click **Next**.
- If you have not satisfied the requirements, click **Cancel**.
  The setup program closes so that you can install the necessary files.

10 In the SESA Domain Administrator Information dialog box, do the following:

- In the SESA Domain Administrator Name text box, type the name of the SESA Domain Administrator account.
- In the SESA Domain Administrator Password text box, type the password for the SESA Domain Administrator account.
- In the IP address of SESA Directory text box, type the IP address of the computer on which the SESA Directory is installed (this may be the same as the SESA Manager IP address if both are installed on the same computer).
  If you are using authenticated SSL instead of the SESA default, anonymous SSL, you must type the host name of the SESA Directory computer. For example, mycomputer.com.
  For more information on SESA default, anonymous SSL, and upgrading to authenticated SSL, see the *Symantec Enterprise Security Architecture Installation Guide*.
- In the Secure Directory Port text box, type the number of the SESA Directory secure port.
  By default, the port number is 636.

11 Click **Next**.

12 In the Ready to proceed dialog box, do one of the following:

- If you are ready to proceed, click **Next**.
- If you want to change your settings, click **Back**.

13 In the Configuring Your System dialog box, view the progress of the Java LiveUpdate installation, and then click **Next**.

14 In the SESA Integration Successful dialog box, verify that your installation is complete, and then click **Finish**.

Chapter 3

Using the Symantec Event Collector for UNIX Operating Systems

This chapter includes the following topics:

- Configuring the Event Collector
- Viewing reports for the Event Collector
- Creating custom reports
- Integrating with Symantec Incident Manager
- Starting and stopping the Event Collector and SESA Agent daemons
- Configuring the SESA Agent
- Using LiveUpdate technology

Configuring the Event Collector

You can configure the Symantec Event Collector for UNIX Operating Systems to filter events that you do not want to forward to the SESA Manager.

Filtering events

You perform event filtering by modifying the DE_CustomerRules.rule file in the /<UNIX>SyslogCollector/kb directory (where <UNIX> is either Linux or Solaris). The DE_CustomerRules.rule file is a special text file that you can edit to determine how some events will be processed by the Event Collector.

Filter events

Events are filtered based on their Standard Event Code. You must know the Standard Event Code for an event before you can filter it. You determine the Standard Event Code for a particular event by examining it in the SESA Console. Then you can filter events so that they are not sent to the SESA Manager.

To determine the Standard Event Code for an event

1. Log on to the SESA Console using a SESA user account with sufficient rights to view SESA events.
2. On the Events view tab, in the left pane, expand the top-level domain, and then expand **SESA DataStore**.
3. Do one of the following:
   - Expand **Host Intrusion Detection**.
   - Expand **Intrusion Detection**.
4. Expand **Symantec Event Collector for <UNIX> Syslog** (where <UNIX> is either Linux or Solaris).
5. Click **All Events**.
6. In the right pane, locate and double-click the event of the type that you want to filter.
7. In the Event Details window, locate the Intrusion Symantec Signature field. The string value of this field (such as SNMP_PROTOS_AttackTool) will be the value on which you will filter.

To filter UNIX operating system events from being sent to the SESA Manager

1. On the Event Collector computer, log on as Administrator.
2. In a text editor, open the **DE_CustomerRules.rule** file in the Symantec Event Collector for UNIX Operating Systems installation directory. The default directory is /opt/Symantec/<UNIX>SyslogCollector/kb (where <UNIX> is either Linux or Solaris).

3 Copy and paste the indicated sample area in the file header to make a duplicate.

This serves as a template so you can replace the ExampleAlert value with the Standard Event Code that you want to filter. For example, the following lines will filter out any events with the Standard Event Code of SNMP_PROTOS_AttackTool:

```
If {GenericAlert} is "SNMP_PROTOS_AttackTool" then
GoalState;
Endif
```

4 Delete the comment marker symbol (#) from the duplicated lines to make them active.

Viewing reports for the Event Collector

The Symantec Event Collector for UNIX Operating Systems lets you use the SESA Console to view events that are logged by the UNIX operating system.

The SESA Integration Package (SIP) that you installed on the SESA Manager includes predefined reports for Symantec Event Collector for UNIX Operating Systems events.

The reports that are specific to UNIX operating system events are stored in the Symantec Event Collector for UNIX Operating Systems folder within the following Event Families:

- Host Intrusion Detection Event Family
- Intrusion Detection Event Family

To view reports for the Event Collector

1 Log on to the SESA Console using a SESA user account with sufficient rights to view SESA reports.

2 On the Events view tab, in the left pane, expand the top-level domain, and then expand **SESA DataStore**.

3 Do one of the following:

- Expand **Host Intrusion Detection**.
- Expand **Intrusion Detection**.

4 Expand **Symantec Event Collector for <UNIX> Syslog** (where <UNIX> is either Linux or Solaris).

Table 3-1 describes the reports that are specific to the Symantec Event Collector for UNIX Operating Systems.

Table 3-1 Symantec Event Collector for UNIX Operating Systems reports

Report name	Format	Description
All Events	Table	Displays all events that are logged by the Event Collector.
Last 30 days	Table	Displays all events that are logged by the Event Collector in the last 30 days.
Last 24 hours	Table	Displays all events that are logged by the Event Collector in the last 24 hours.
Last 8 hours	Table	Displays all events that are logged by the Event Collector in the last 8 hours.
By Severity	Pie chart	Displays the distribution of UNIX operating system events by SESA severity level.
By Generic Alert	Pie chart	Displays the most frequent Generic Alert codes reported by the Event Collector. The Generic Alert code is a Symantec normalized code that uniquely identifies a security event.

Creating custom reports

In addition to the reports in the Intrusion Detection and the Host Intrusion Detection folders, you can create customized event reports that display data that interests your organization.

For example, to create a report that shows all of the connection attempts for a specific IP address, you can display the All Events report and add a filter that reports the IP address in which you are interested.

For more information, see the *Symantec Enterprise Security Architecture Administrator's Guide*.

Integrating with Symantec Incident Manager

If you have Symantec Incident Manager installed, you can leverage many powerful event escalation and incident management features to do the following:

- Manually escalate an event or selection of events to an incident.
- Assign incidents to operational personnel and track status.

- Receive targeted information describing incidents with known signatures and the business impact.

For more information, see the *Symantec Incident Manager Implementation Guide*.

Starting and stopping the Event Collector and SESA Agent daemons

You can start or stop the Event Collector or the SESA Agent daemon if necessary.

Start and stop the Event Collector and SESA Agent daemons

The Symantec Event Collector for UNIX Operating Systems runs as a daemon on the host on which it is installed. To start and stop the Symantec Event Collector for UNIX Operating Systems, you start and stop the daemon as necessary.

To start or stop the Event Collector daemon on Linux or Solaris

1. On the computer on which you installed the Event Collector, become superuser.
2. At the command prompt, do one of the following:

Start the Symantec Event Collector for UNIX Operating Systems daemon	Do one of the following: ■ On Linux, type: **`/etc/rc3.d/S99LinuxSyslogCollector start`** ■ On Solaris, type: **`/etc/rc3.d/S99SolarisSyslogCollector start`**
Stop the Symantec Event Collector for UNIX Operating Systems daemon	Do one of the following: ■ On Linux, type: **`/etc/rc3.d/S99LinuxSyslogCollector stop`** ■ On Solaris, type: **`/etc/rc3.d/S99SolarisSyslogCollector stop`**

To start or stop the SESA Agent daemon on Linux or Solaris

1. On the computer on which you installed the SESA Agent, become superuser.
2. At the command prompt, do one of the following:
   - To start the SESA Agent daemon, type the following command:
     `/etc/rc3.d/S99sesagentd start`
   - To stop the SESA Agent daemon, type the following command:
     `/etc/rc3.d/S99sesagentd stop`

Configuring the SESA Agent

The SESA Agent uses default logging parameters that are appropriate for most event collection circumstances. Table 3-2 lists the logging parameters.

Table 3-2 SESA Agent logging parameters

Logging parameter	Default value	Description
Listen IP	127.0.0.1	The IP address on which the SESA Agent listens.
Listen port	8086	The port on which the SESA Agent listens.
Management servlet	EventLogger	The SESA Management servlet to which the SESA Agent sends messages. **Note:** This parameter should be changed with caution.
Disconnected mode retry interval	30 minutes	The retry interval for sending events to the SESA Manager, when the SESA Manager cannot be contacted.
Maximum queue size	2000 kb	The maximum size of the queue in kilobytes. Any subsequent log requests are refused.
App flush size App flush time App flush count	15 seconds 50 kb 35	The triggers that, when tripped, send outbound SESA Agent data to the SESA Manager. **Note:** This applies only to batch events. Direct events are always sent as soon as possible.

Table 3-2 SESA Agent logging parameters

Logging parameter	Default value	Description
App spool size	100 kb	The size in kilobytes of the Event Collector queue that the SESA Agent holds in memory when not able to send the normal queue to the SESA Manager. If the queue exceeds this size and it still needs to grow, the queue is written to the hard disk.
Encrypt config file	false	If true, the configuration file that is located on the computer with the SESA Agent is encrypted.

You can adjust these parameters in the SESA Console, on the Configurations view tab.

For more information, see the *Symantec Enterprise Security Architecture Administrator's Guide*.

Using LiveUpdate technology

LiveUpdate technology lets installed Symantec products connect to a server automatically for program updates. The connection is made through an HTTP or FTP site. Using LiveUpdate technology assures that you always have the most recent version of your licensed Symantec software installed.

Running LiveUpdate for the Event Collector manually

On a Solaris or Linux computer, LiveUpdate is invoked by running the installed LiveUpdate.sh script. If you have distributed a SESA configuration for Java LiveUpdate to the Event Collector computer, it will use those settings when LiveUpdate runs.

To run LiveUpdate for the Event Collector manually

1. On the Event Collector computer, become superuser.
2. At the command prompt, change directories to:
   /opt/Symantec/LiveUpdate

3 Do one of the following:

- On Linux, type:
  ```
  ./liveupdate.sh LinuxSyslogCollector en_US
  ```
- On Solaris, type:
  ```
  ./liveupdate.sh SolarisSyslogCollector en_US
  ```

About scheduling LiveUpdate for the Event Collector

The Event Collector installation will schedule automatic LiveUpdate sessions to ensure that you regularly obtain the latest updates. Two LiveUpdate sessions are scheduled at the following times:

- Every Monday at 1AM
  This session updates the Event Collector rules and knowledge base files.
- Every Tuesday at 1AM
  This session updates the Event Collector code.

On Solaris or Linux, the two new cron jobs are automatically added to the crontab file. Ensure that the cron job has root user access to successfully execute the command.

Appendix A

Using Java LiveUpdate

This chapter includes the following topics:

- Viewing Java LiveUpdate events
- About Java LiveUpdate configurations
- Working with Java LiveUpdate configurations
- Editing Java LiveUpdate configuration properties
- Modifying a Java LiveUpdate configuration
- Distributing a Java LiveUpdate configuration

Viewing Java LiveUpdate events

When Java LiveUpdate is integrated with SESA, you can view events that report the status of LiveUpdate sessions on computers in your network environment.

To see Java LiveUpdate events in the SESA Console, the SESA Agent, which is installed with Java LiveUpdate on each Java LiveUpdate client computer, must first establish a connection with the SESA Manager.

View Java LiveUpdate events

You can view the success or failure of this connection on the Events view tab of the SESA Console. Any Successful Agent Start-up Events or Failed Agent Start-up Events are listed in the left pane in the System Events folder's SESA System subfolder.

All other Java LiveUpdate events appear in the left pane in the System Events folder's LiveUpdate subfolder.

To view SESA Agent startup events

1. On the Events view tab, in the left pane, expand **SESA DataStore**.
2. Under SESA DataStore, expand **System Events** > **SESA System**.
3. Select one of the following reports:
   - Successful Agent Start-up Events
   - Failed Agent Start-up Events

   The status bar in the lower-left corner of the window indicates how many events are in the report and which events you are viewing.

To view all other Java LiveUpdate events

1. On the Events view tab, in the left pane, expand **SESA DataStore**.
2. Under SESA DataStore, expand **System Events** > **LiveUpdate**.
3. Select any of the reports.
   The status bar in the lower-left corner of the window indicates how many events are in the report and which events you are viewing.

About Java LiveUpdate configurations

Java LiveUpdate installs with a default configuration, as specified in the LiveUpdate.conf configuration file. However, you may want to modify a configuration or distribute additional configurations to Java LiveUpdate client computers.

You can use the SESA Console to create and distribute additional LiveUpdate configurations to one or more computers on which Java LiveUpdate is installed. In addition, SESA provides a Default Java LiveUpdate configuration, which you can also configure for distribution to Java LiveUpdate computers.

When you create or modify a Java LiveUpdate configuration, you must specify which Java LiveUpdate computers to associate with the configuration. You can specify individual computers, organizational units, configuration units, or any combination that suits your network topology. You must also specify the SESA organizational unit to which the computer or computers belong. As an option, you can specify any configuration groups to which the computer or computers belong.

Java LiveUpdate configurations let you specify network proxy server settings that may be required for Java LiveUpdate sessions in your network environment. You can also specify additional LiveUpdate HTTP or FTP servers to use for downloading product updates. In addition, you can create a LiveUpdate configuration to specify that certain LiveUpdate computers use a LiveUpdate configuration file other than the default one. You can specify that

certain LiveUpdate computers use an internal LiveUpdate Administration host server. Java LiveUpdate configurations also let you specify the maximum size of LiveUpdate log files.

To create a new Java LiveUpdate configuration, you use the Create a new Configuration Wizard.

After the configuration is created, you can make additional changes by selecting Properties.

You can also configure the Default Java LiveUpdate configuration.

See "Working with Java LiveUpdate configurations" on page 51.

See "Distributing a Java LiveUpdate configuration" on page 54.

Working with Java LiveUpdate configurations

You can create a new Java LiveUpdate configuration, or modify an existing one, such as the Default configuration.

Work with Java LiveUpdate configurations

Before you can distribute a Java LiveUpdate configuration, you must first configure it for distribution. You can do this by modifying an existing configuration, such as the Default Java LiveUpdate configuration, or you can create a new Java LiveUpdate configuration.

To create a new LiveUpdate configuration, you must use the Create a new Configuration wizard.

After you have created or modified a configuration as appropriate, you can distribute it to Java LiveUpdate computers.

See "Distributing a Java LiveUpdate configuration" on page 54.

To modify an existing Java LiveUpdate configuration

1. Edit the Java LiveUpdate configuration properties to add the computers that will use the Java LiveUpdate configuration.
   See "Editing Java LiveUpdate configuration properties" on page 53.
2. Modify the Java LiveUpdate configuration to specify configuration settings.
   See "Modifying a Java LiveUpdate configuration" on page 53.

To create a new Java LiveUpdate configuration

1. On the Configurations view tab, in the left pane, under the top-level SESA domain, expand **LiveUpdate** > **Java LiveUpdate**.
2. Right-click **Java LiveUpdate**, and then click **New**.

3 In the first dialog box of the Create a new Configuration wizard, click **Next**.

4 In the General dialog box, type a configuration name, and optionally, a description, and then click **Next**.

5 In the Computers dialog box, click **Add**.

6 In the Searching for Computers dialog box, in the Computer name text box, type a specific computer name or a combination of letters and an asterisk, and then click **Search**.

By default, the Computer name text box contains an asterisk (*), which serves as a wildcard character, displaying all computers that have been defined.

7 On the Found tab, select one or more computers, and then click **OK**.

8 In the Computers dialog box, repeat steps 5 through 7 as necessary, and then click **Next**.

9 In the Configuration Groups dialog box, do one of the following:

- If your computer or computers belong to a configuration group, click **Add**, select the configuration group to which the computer or computers belong, click **OK**, and then in the Configuration Groups dialog box, click **Next**.
- If your computer or computers do not belong to a configuration group, click **Next**.

10 In the Organizational Units dialog box, to associate an organizational unit with the selected computer, click **Add**.

11 In the Browse for Organizational Units dialog box, on the Found tab, select the organizational unit to which the computer or computers belong, and then click **OK**.

12 Repeat steps 10 and 11 as necessary.

13 Click **Next**, and then click **Next** again.

14 Review the Configuration summary, and then click **Finish**.

15 Click **Close**.

Editing Java LiveUpdate configuration properties

You must add the computers that will use the Java LiveUpdate configuration before you can distribute the configuration. At a minimum, you must specify the computer names and associated organizational units.

To edit Java LiveUpdate configuration properties

1. On the Configurations view tab, in the left pane, under the top-level SESA domain, expand **LiveUpdate** > **Java LiveUpdate**.
2. Under Java LiveUpdate, right-click the configuration that you want to modify, and then click **Properties**.
3. In the Configuration Properties dialog box, on the Computers tab, to add a computer, click **Add**.
4. In the Searching for Computers dialog box, in the Computer name text box, type a specific computer name or a combination of letters and an asterisk, and then click **Search**.
   By default, the Computer name text box contains an asterisk (*), which serves as a wildcard character, displaying all computers that have been defined.
5. On the Found tab, select one or more computers, and then click **OK**.
6. If your computer is associated with a configuration group, on the Configuration Groups tab, click **Add**.
7. In the Find Configuration Groups dialog box, on the Found tab, select the configuration group to which the computer belongs, and then click **OK**.
8. On the Organizational Units tab, to associate an organizational unit with the selected computer, click **Add**.
9. In the Browse for Organizational Units dialog box, on the Found tab, select the organizational unit to which the computer belongs, and then click **OK**.
10. Repeat steps 4 through 9 as necessary.
11. In the Configuration Properties dialog box, click **OK**.

Modifying a Java LiveUpdate configuration

To change an existing Java LiveUpdate configuration, you modify one or more settings on the Java LiveUpdate tabs.

To modify a Java LiveUpdate configuration

1. On the Configurations view tab, in the left pane, under the top-level SESA domain, expand **LiveUpdate** > **Java LiveUpdate**.
2. Under Java LiveUpdate, select the configuration that you want to modify.
   Java LiveUpdate configuration settings tabs appear in the right pane.
3. Modify the configuration using the following tabs as necessary:
   - General configuration settings
   - Java LiveUpdate configuration settings
   - Hosts configuration settings

Distributing a Java LiveUpdate configuration

You can distribute a Java LiveUpdate configuration to any of the following computer platforms:

- Windows 32-bit
- Linux
- Solaris
- AIX
- HP-UX
- Macintosh

To successfully distribute a Java LiveUpdate configuration, you must have specified the target computers and organizational units when you created or modified the Java LiveUpdate configuration.

To distribute a Java LiveUpdate configuration

1. On the Configurations view tab, in the left pane, under the top-level SESA domain, expand **LiveUpdate** > **Java LiveUpdate**.
2. Under Java LiveUpdate, right-click a configuration, and then click **Distribute**.
3. When you are prompted to distribute the configuration, click **Yes**.
   A message is sent to the computers that are associated with the Java LiveUpdate configuration, instructing them to contact the SESA Manager for a new configuration.

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